

# **DRAFT**

## **ARTICLE 7 (40 CFR Part 63 112(g)) CASE-BY-CASE MACT PERMIT STATIONARY SOURCE PERMIT TO CONSTRUCT AND OPERATE**

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Virginia Electric and Power Company  
5000 Dominion Boulevard  
Glen Allen, Virginia 23060  
Registration No.: 11526

is authorized to construct and operate

two circulating fluidized bed (CFB) boilers each rated at  $3,132 \times 10^6$  Btu/hr (MMBtu/hr)

located at

Alternate Route 58, Virginia City, Wise County, Virginia

in accordance with the Conditions of this permit.

Approved on **DRAFT.**

Dallas R. Sizemore  
Regional Director

Permit consists of 26 pages.  
Permit Conditions 1 to 51.

## **INTRODUCTION**

This permit approval is based on the permit application dated February 15, 2008; as updated February 25, 2008 with emission calculations and February 27, 2008 with coal analyses and a replacement page 16 of the application. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-10-20 and 9 VAC 5-80-1410 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The regulatory reference or authority for each condition is listed in parentheses () after each condition.

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

## **PROCESS REQUIREMENTS**

1. **Equipment List** - Equipment at this facility consists of the following:

<b>Equipment to be Constructed</b>			
<b>Reference No.</b>	<b>Equipment Description</b>	<b>Rated Capacity</b>	<b>Federal Emission Standards</b>
CFB1 and CFB2	Two circulating fluidized bed (CFB) boilers	$3,132 \times 10^6$ Btu/hr (MMBtu/hr), each	Case-by-Case MACT 112(g)

Specifications included in the permit under this Condition are for informational purposes only and do not form enforceable terms or conditions of the permit.  
(9 VAC 5-80-1470 D 3)

2. **Emission Controls** – Particulate hazardous air pollutant emissions from each CFB boiler shall be controlled by a fabric filter baghouse. Each fabric filter baghouse shall be provided with adequate access for inspection.  
(9 VAC 5-80-1470 and 40 CFR 63.43(g))

3. **Emission Controls** – Hydrogen chloride and hydrogen fluoride emissions from the CFB boilers shall be controlled by limestone injection into each boiler, a flue gas desulfurization system for each boiler, and a fabric filter baghouse for each boiler. Each limestone injection, flue gas desulfurization system and fabric filter baghouse shall be provided with adequate access for inspection. This condition applies at all times except during startup and shutdown of the CFB boilers.  
(9 VAC 5-80-1470 and 40 CFR 63.43(g))
4. **Emission Controls** – Volatile organic hazardous air pollutant emissions from the CFB boilers shall be controlled by good combustion practices, an activated carbon injection system for each boiler and a fabric filter baghouse for each boiler. Each boiler, activated carbon injection system, and fabric filter baghouse shall be provided with adequate access for inspection.  
(9 VAC 5-80-1470 and 40 CFR 63.43(g))
5. **Emission Controls** – Mercury emissions from the CFB boilers shall be controlled by a flue gas desulfurization system for each boiler, an activated carbon injection system for each boiler, and a fabric filter baghouse for each boiler. Each flue gas desulfurization system, activated carbon injection system, and fabric filter baghouse shall be provided with adequate access for inspection.  
(9 VAC 5-80-1470 and 40 CFR 63.43(g))
6. **Emissions Testing** – The CFB boilers shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Upon request by DEQ, sampling ports, safe sampling platforms and access shall be provided at the appropriate locations.  
(9 VAC 5-80-1470, 9 VAC 5-50-30 F and 40 CFR 63.43(g))

### **OPERATING LIMITATIONS**

7. **Heat Input** – Heat input to each CFB boiler shall not exceed  $27,436,320 \times 10^6$  Btu per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-1470 and 40 CFR 63.43(g))
8. **Fuel** – The approved fuels for the CFB boilers are bituminous coal, coal refuse, wood/bark, distillate oil and diesel fuel. The fuels shall meet the following specifications:

COAL and COAL REFUSE:

Maximum sulfur content as-fired:

by ASTM D3177, D4239, or a DEQ-approved equivalent method.

2.28% as determined

DISTILLATE OIL which meets the ASTM D396 specification for numbers 1 or 2 fuel oil:  
Maximum sulfur content per shipment: 0.0015%

WOOD/BARK excluding any wood which contains chemical treatments or has affixed thereto paint and/or finishing materials or paper or plastic laminates.

DIESEL FUEL which meets the ASTM D975 specification for numbers 1-D S15 or 2-D S15 diesel fuel:  
Maximum sulfur content per shipment: 0.0015%

A change in the fuels may require a permit to modify and operate.  
(9 VAC 5-80-1470 and 40 CFR 63.43(g))

9. **Fuel Sampling and Analysis** – The permittee shall sample and analyze the fuel as fired in each CFB boiler for mercury, fluorides, chlorides, sulfur, and Btu content no less than once each calendar week using methods approved by the Director, Southwest Regional Office. Results of analyses shall be used in calculations to verify compliance with mercury, hydrogen fluoride, hydrogen chloride and sulfuric acid mist emission limits for the CFB boilers. A record of each analysis shall be maintained and shall include, at a minimum, content of each parameter, company and individual collecting the sample, identification of sampling method used, sample mass, number of samples, date sample collected, location of fuel when sample taken, date of analysis, company and individual conducting the analysis.  
(9 VAC 5-80-1470 and 40 CFR 63.43(g))
10. **Fuel Throughput** – The throughput of coal and coal refuse to each CFB boiler shall not exceed 1,760,760 tons per year calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-1470 and 40 CFR 63.43(g))
11. **Fuel Throughput** – The throughput of wood/bark to each CFB boiler shall not exceed 685,000 tons per year calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-1470 and 40 CFR 63.43(g))
12. **Fuel Certification** – The permittee shall obtain a certification from the fuel supplier with each shipment of coal, coal refuse, wood/bark, distillate oil and diesel fuel. Each fuel supplier certification shall include the following:
  - a. The name of the fuel supplier;

- b. The date on which the fuel was received;
- c. The quantity of fuel delivered in the shipment;
- d. A statement that the oil meets the ASTM D396 specification for fuel oil numbers 1 or 2, or ASTM D975 for diesel fuel numbers 1-D S15 or 2-D S15;
- e. The sulfur content of the fuel, excluding wood/bark;
- f. Documentation of sampling of the fuel indicating the location of the fuel when the sample was taken; and
- g. The methods used to determine the sulfur content of the fuel.

The permittee shall submit a fuel shipment certification plan at least 60 days prior to facility startup for approval by the Director, Southwest Regional Office. Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in this permit. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.

(9 VAC 5-80-1470, 9 VAC 5-50-410 and 40 CFR 63.43(g))

### **EMISSION LIMITS**

13. **Emission Limits** – Emissions from the operation of the CFB boilers shall not exceed the following limits:

	Each Boiler (lb/MMBtu)	Each Boiler (lb/hr) <sup>a</sup>	Combined Total (tons/yr)
Filterable Particulate Matter (PM)			274.36
3-hour average	0.010	31.32	
Total PM-10 (filterable & condensable)			329.24
3-hour average	0.012	37.58	
Total PM-2.5 (filterable & condensable)			329.24 <sup>b</sup>
3-hour average	0.012 <sup>b</sup>	37.58 <sup>b</sup>	
Carbon Monoxide			4,115.45
30-day rolling average	0.15 <sup>c</sup>	469.80	
Volatile Organic Compounds			137.18
3-hour average	0.005	15.66	

	Each Boiler (lb/MMBtu)	Each Boiler (lb/hr) <sup>a</sup>	Combined Total (tons/yr)
Hydrogen Fluoride 3-hour average	0.00047	1.47	12.90
Hydrogen Chloride 3-hour average	0.0066	20.67	181.07
Mercury	(lb/MW hr) 0.000014 <sup>d</sup>		49.46 lb/yr <sup>e</sup>

<sup>a</sup> Compliance with the lb/hr limit is based on the averaging period indicated in the appropriate row.

<sup>b</sup> This permit may be changed in accordance with 9 VAC 5-80-1925, to reduce the emission limit based on results from stack testing as required in Condition 27 of this permit.

<sup>c</sup> Emission limit applies at loads equal to or greater than 75 percent of maximum load. Maximum load for each CFB boiler is considered to be 3,132 MMBtu/hr heat input. The emission limit for loads less than 75 percent is the 30-day load-weighted average expressed by the formula below. The emission limit for loads equal to or greater than 75 percent is fixed at 0.15 lb/MMBtu, however, this limit is factored into the 30-day load-weighted average for loads less than 75 percent. The permittee shall calculate the 30-day weighted average emission limit for loads less than 75 percent using the following formula:

$$EL_{CO\ 30d\ L} = \frac{\sum_{i=1}^n EL_i \times IR_i}{\sum_{i=1}^n IR_i}$$

where,

$EL_{CO\ 30d\ L}$  = 30-day weighted average carbon monoxide emission limit;  
lb/MMBtu

$EL_i$  = 0.15 lb/MMBtu for loads equal to or greater than 75 percent, or  
0.20 lb/MMBtu for loads less than 75 percent

$IR_i$  = the heat input rate corresponding to the incremental CEMS  
reading; MMBtu

$i$  = incremental CEMS reading having a non-zero heat input rate

$n$  = the number of incremental CEMS readings in the rolling 30-day  
period when there is a heat input rate in the load range

- <sup>d</sup> Compliance with the emission limit shall be based on the total mercury emissions from each CFB boiler contributed by each fuel burned during the compliance period and total MWhr contributed by each fuel burned during the compliance period. The permittee shall calculate the mercury emission rate in lb/MWhr for each calendar month of the year, using hourly mercury concentrations measured in accordance with Condition 18 and in conjunction with hourly stack gas volumetric flow rates measured in accordance with Condition 17, and hourly gross electrical outputs, determined in accordance with Condition 23. Compliance with the mercury emission limits shall be determined on a 12-month rolling average basis and using stack test data if stack testing is conducted during that month. Mercury emissions contributed by wood/bark and fuel oil combustion shall be calculated using emission factors or methods approved by the Director, Southwest Regional Office. Compliance with the applicable emission limit shall be determined on a 12-month rolling average basis.
- <sup>e</sup> The annual mercury emission limit is based on an average of 0.3511 ppmw of mercury in the coal, a higher heating value of 6600 Btu/lb of coal and a 98% control efficiency. Deviations from this limit are allowed if, on a 12-month rolling average basis, the permittee can document through the weekly coal analysis of coal burned in the CFB boilers that the mercury content in the coal averages higher than 0.3511 ppmw and/or the higher heating value of the coal is less than 6600 Btu/lb.

Annual emissions are derived from the estimated overall emission contribution from operating limits including startup and shutdown. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Annual emissions are calculated monthly as the sum of each consecutive 12-month period. Compliance with these emission limits may be determined as stated in, but not limited to, Conditions 2, 3, 4, 5, 7, 8, 10, 11, 16, 18, 19, 25, 27, 28, 29, and 34.

(9 VAC 5-80-1470, 9 VAC 5-50-280, 9 VAC 5-50-410 and 40 CFR 63.43(g))

14. **Visible Emission Limit** – Visible emissions from the common exhaust stack with individual flues for the CFB boilers shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
(9 VAC 5-80-1470, 9 VAC 5-50-80, 9 VAC 5-50-280 and 40 CFR 63.43(g))
15. **Requirements by Reference** – The permittee shall comply with all applicable requirements contained in 40 CFR Part 63, Subpart A.
- a. In particular, for the CFB boilers, the permittee shall comply with the following applicable requirements of 40 CFR 63, Subpart A, related to startup, shutdown, and malfunction, as defined at 40 CFR 63.2:

- i. The permittee shall at all times, including periods of startup, shutdown, and malfunction as defined at 40 CFR 63.2, operate the CFB boilers and associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions to the levels required by the relevant standards, i.e., meet the emission standard(s) or comply with the applicable Startup, Shutdown, and Malfunction Plan (Plan), as required below. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department and USEPA, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the Plan), review of operation and maintenance records, and inspection of the CFB boilers.
  - ii. The permittee shall correct malfunctions as soon as practicable after their occurrence in accordance with the applicable Plan. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, the permittee shall comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.
  - iii. These operations and maintenance requirements, which are established pursuant to Section 112 of the Clean Air Act, are enforceable independent of applicable emissions limitations and other applicable requirements.
- b. The permittee shall develop, implement, and maintain written Startup, Shutdown, and Malfunction Plans (Plans) that describe, in detail, the plant during periods of startup, shutdown, and malfunction and a program of corrective action for a malfunctioning process, and air pollution control and monitoring equipment used to comply with the relevant emission standards. These Plans shall be developed to satisfy the purposes set forth in 40 CFR 63.6 (e) (3) (i) (A), (B) and (C). The permittee shall develop its initial Plans prior to the initial startup of an emissions unit(s).
- i. During periods of startup, shutdown, and malfunction of an emission unit, the permittee shall operate and maintain such unit, including associated air pollution control and monitoring equipment, in accordance with the procedures specified in the applicable Plan required in Condition 15.b.
  - ii. When actions taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the applicable Plan, the permittee shall keep records for that event which demonstrate that the procedures specified in the Plan were followed. In addition, the permittee shall keep records of these events as specified in 40 CFR 63.10(b), including records of occurrence and duration of each startup, shutdown, or malfunction and monitoring equipment. Furthermore, the permittee shall confirm in the periodic compliance report that actions taken during periods of startup, shutdown,



and malfunction were consistent with the applicable Plan, as required by 40 CFR 63.10 (d) (5).

- iii. If an action taken by the permittee during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) of an emission unit is not consistent with procedures specified in the applicable Plan, and the emission unit exceeds a relevant emission standard, then the permittee must record the actions taken for that event and must promptly report such actions as specified by 40 CFR 63.6 (d) (5), unless otherwise specified elsewhere in this permit.
- iv. The permittee shall make changes to the Plan for an emission unit if required by the Department or USEPA, as provided for by 40 CFR 63.6 9e) (3) (vii), or as otherwise required by 40 CFR 63.6 (e) (viii).
- v. These Plans are records required by this permit, which the Permittee must retain in accordance with the general requirements for retention and availability of records. In addition, when the permittee revises a Plan, the permittee must also retain and make available the previous version of the Plan for a period of at least 5 years after such revision.

(9 VAC 5-80-1470 and 40 CFR Part 63, Subpart A)

#### **CONTINUOUS MONITORING SYSTEMS**

**16. Continuous Emission Monitoring Systems** – The permittee shall install, calibrate, maintain, operate and record the output of continuous emission monitoring systems (CEMS) for measuring emissions of carbon monoxide from each CFB boiler. Each CEMS shall be installed, calibrated, maintained, and operated in accordance with the applicable requirements of 40 CFR 60.13 and DEQ approved procedures.

(9 VAC 5-80-1470, 9 VAC 5-50-40, 40 CFR 60.13 and 9 VAC 5-50-410)

**17. Continuous Emission Monitoring Systems** – The permittee shall install, calibrate, maintain, operate and record the output of continuous flow monitoring systems for measuring the volumetric flow rate of exhaust gases discharged to the atmosphere from each CFB boiler. Each flow monitoring system shall be installed, calibrated, maintained, and operated in accordance with the applicable requirements of 40 CFR 60.13, 40 CFR 60.49Da(l) or (m), and DEQ approved procedures.

(9 VAC 5-80-1470, 9 VAC 5-50-40, 9 VAC 5-50-410 and 40 CFR 63.43(g))

**18. Continuous Emission Monitoring Systems** – The permittee shall install, calibrate, maintain, and operate a CEMS to measure and record the concentration of mercury in the exhaust gases from each CFB boiler, as follows:

- a. The owner or operator must install, operate, and maintain each CEMS according to Performance Specification 12A in appendix B of 40 CFR Part 60.
- b. The owner or operator must conduct a performance evaluation of each CEMS according to the requirements of 40 CFR 60.13 and Performance Specification 12A in appendix B of 40 CFR Part 60.
- c. The owner or operator must operate each CEMS in accordance with the following requirements:
  - i. As specified in 40 CFR 60.13(e)(2), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period;
  - ii. The owner or operator must reduce CEMS data as specified in 40 CFR 60.13(h);
  - iii. The owner or operator shall use all valid data points collected during the hour to calculate the hourly average mercury concentration; and
  - iv. The owner or operator must record the results of each required certification and quality assurance test of the CEMS.
- d. Mercury CEMS data collection must conform to the following requirements:
  - i. For each calendar month in which the affected unit operates, valid hourly mercury concentration data, stack gas volumetric flow rate data, moisture data (if required), and electrical output data (i.e., valid data for all of these parameters) shall be obtained for at least 75 percent of the unit operating hours in the month.
  - ii. Data reported to meet the requirements of this subpart shall not include hours of unit startup, shutdown, or malfunction. In addition, for an affected facility that is also subject to subpart I of part 75 of this chapter, data reported to meet the requirements of this subpart shall not include data substituted using the missing data procedures in subpart D of part 75 of this chapter, nor shall the data have been bias adjusted according to the procedures of part 75 of this chapter.
  - iii. If valid data are obtained for less than 75 percent of the unit operating hours in a month, you must discard the data collected in that month and replace the data with the mean of the individual monthly emission rate values determined in the last 12 months. In the 12-month rolling average calculation, this substitute Hg emission rate shall be weighted according to the number of unit operating hours in the month for which the data capture requirement of Condition 18. d.i. was not met.

- iv. Notwithstanding the requirements of Condition 18. d.iii., if valid data are obtained for less than 75 percent of the unit operating hours in another month in that same 12-month rolling average cycle, discard the data collected in that month and replace the data with the highest individual monthly emission rate determined in the last 12 months. In the 12-month rolling average calculation, this substitute mercury emission rate shall be weighted according to the number of unit operating hours in the month for which the data capture requirement of Condition 18 d.i. was not met.

(9 VAC 5-80-1470, 9 VAC 5-50-40, and 40 CFR 63.43(g))

19. **Continuous Monitoring Systems** – The permittee shall demonstrate compliance with the particulate matter emission limits for each CFB boiler and monitor the performance of each fabric filter baghouse for the CFB boilers in accordance with either paragraph a. or b. of this condition.
- a. Install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS), in accordance with 40 CFR 60.13, and comply with either i. or ii. as follows:
    - i. Evaluate opacity in accordance with 40 CFR 60.48Da(o)(2)(i) through (vi), or
    - ii. Install, calibrate, maintain, and operate a bag leak detection system in accordance with 40 CFR 60.48Da(o)(4).
  - b. Install, certify, maintain, and operate a CEMS for measuring PM emissions from each CFB boiler, in accordance with 40 CFR 60.49Da(v)(1) through(3).

(9 VAC 5-80-1470 D, 40 CFR 60.48Da(o), 9 VAC 5-50-410 and 40 CFR 63.43(g))

20. **Monitoring Plan** – The permittee shall prepare and submit for approval a unit-specific monitoring plan for each monitoring system for the CFB boilers, at least 45-days before commencing certification testing of the monitoring systems. The permittee shall comply with the requirements in the approved plan. The plan shall address the following:
- a. Installation of the CEMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of the exhaust emissions;
  - b. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;
  - c. Performance evaluation procedures and acceptance criteria;

- d. Ongoing operation and maintenance procedures, ongoing data quality assurance procedures and ongoing recordkeeping and reporting procedures in accordance with 40 CFR 60 Subpart Da, the general requirements of 40 CFR 60.13 or 40 CFR part 75 as applicable.

(9 VAC 5-80-1470, 9 VAC 5-50-50, 40 CFR 60.49Da(s), 9 VAC 5-50-410 and 40 CFR 63.43(g))

- 21. **CEMS/COMS Performance Evaluations** – Performance evaluations of the continuous monitoring systems shall be conducted in accordance with 40 CFR Part 60, Appendix B, and shall take place during the performance tests under 9 VAC 5-50-30 or within 30 days thereafter. Two copies of the performance evaluations report shall be submitted to the Director, Southwest Regional Office within 60 days of the evaluation. The continuous monitoring systems shall be installed and operational prior to conducting initial performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation and calibration of the device. A 30-day notification, prior to the demonstration of the continuous monitoring system's performance, and subsequent notifications shall be submitted to the Director, Southwest Regional Office.

(9 VAC 5-80-1470, 9 VAC 5-50-40, and 40 CFR 63.43(g))

- 22. **CEMS/COMS Quality Control Program** – A CEMS/COMS quality control program which meets the requirements of 40 CFR 60.13 and Appendix B or F as applicable shall be implemented for all continuous monitoring systems except that Relative Accuracy Test Audits (RATA's) may be required less frequently if approved by DEQ.

(9 VAC 5-80-1470, 9 VAC 5-50-40 and 40 CFR 63.43(g))

- 23. **Monitoring Devices** – The permittee shall install, calibrate, maintain, and operate the following:

- a. A meter measuring gross electrical output of the facility in megawatt hours (MWhr); and
- b. A meter measuring steam production for each CFB boiler.

Steam production measurements shall be used to allocate gross electrical output to each CFB boiler. Each meter shall be operated and the output recorded on a continuous basis. Each meter shall be provided with adequate access for inspection.

(9 VAC 5-80-1470, 40 CFR 60.49Da(k)(1), 9 VAC 5-50-410 and 40 CFR 63.43(g))

- 24. **Monitoring Devices** – The permittee shall install, calibrate, maintain, and operate a system for monitoring the throughput of each type of fuel to each CFB boiler. Each monitoring system shall be installed, calibrated and maintained in accordance with the manufacturer's recommendations at a minimum and shall be provided with adequate access for inspection.

(9 VAC 5-80-1470 and 40 CFR 63.43(g))

## **REPORTING**

25. **Excess Emissions Reports** –The permittee shall submit written reports to the Director, Southwest Regional Office of excess emissions from any process monitored by a continuous monitoring system (COMS/CEMS) on a quarterly basis, postmarked by the 30th day following the end of the calendar quarter. The permittee may submit the reports in electronic format as approved by DEQ. Each report shall include the following information, at a minimum:

- a. The magnitude of excess emissions, any conversion factors used in the calculation of excess emissions, and the date and time of commencement and completion of each period of excess emissions;
- b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the process, the nature and cause of the malfunction (if known), the corrective action taken or preventative measures adopted;
- c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments;
- d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in that report.

(9 VAC 5-80-1470, 9 VAC 5-50-50, 40 CFR 60.7, 40 CFR 60.51Da(i), 9 VAC 5-50-410 and 40 CFR 63.43(g))

26. **Semi-Annual Reports** – The permittee shall submit written reports to the Director, Southwest Regional Office for each continuous monitoring system on a semi-annual basis, postmarked by the 30th day following the end of each six-month period. The permittee may submit the reports in electronic format as approved by DEQ. Reports submitted in electronic format shall be submitted on a quarterly basis. Each report, written or electronic, shall include the following, at a minimum:

- a. Company name and address;
- b. Date of report and beginning and ending dates of the reporting period;
- c. A signed statement indicating whether:
  - i. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified;
  - ii. The data used to show compliance was or was not obtained in accordance with

approved methods and procedures and is representative of plant performance;

- iii. The minimum data requirements have or have not been met; or, the minimum data requirements have or have not been met for errors that were unavoidable. If the minimum quantity of emission data as required by 40 CFR 60.49Da is not obtained for any 30 successive boiler operating days, the information indicated in 40 CFR 60.51Da(c) shall be submitted; and
  - iv. Compliance with the standards has or has not been achieved during the reporting period.
- d. With regard to opacity monitoring for the CFB boilers:
- i. Description of any modifications to the continuous opacity monitors, which could effect the ability of the COMS to comply with the performance specifications under 40 CFR 60, Appendix B; and
  - ii. For any periods for which opacity data are not obtained, the permittee shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and the affected boiler during periods of data unavailability are to be compared with operation of the control system and the affected boiler before and following the period of data unavailability.
- e. With regard to mercury emissions and emissions monitoring for the CFB boilers:
- i. The applicable mercury emission limit;
  - ii. The number of unit operating hours for each month in the reporting period;
  - iii. The number of unit operating hours with valid data for mercury concentration, stack gas flow rate, moisture (if required), and electrical output for each month in the reporting period;
  - iv. The monthly average ppmw mercury content of coal burned, the monthly average Btu value of coal burned, and the mercury emission rate in both lbs/month and lbs/MW-hr for each month in the reporting period;
  - v. The number of hours of valid data excluded from the calculation of the monthly mercury emission rate, due to unit startup, shutdown and malfunction for each month in the reporting period;
  - vi. The 12-month rolling average mercury emission rate in lbs/year for each month in the reporting period; and

- vii. The data assessment report required by Appendix F or an equivalent summary of QA test results if the QA of 40 CFR Part 75 are implemented.

One copy of the semi-annual report shall be submitted to the U.S. Environmental Protection Agency (USEPA) at the address specified in Condition 36.  
(9 VAC 5-80-1470, 9 VAC 5-170-160, 9 VAC 5-50-50, 9 VAC 5-50-410 and 40 CFR 63.43(g))

### **INITIAL COMPLIANCE DETERMINATION**

27. **Stack Test** – Initial performance tests shall be conducted for particulate matter, PM-10, carbon monoxide, volatile organic compounds, mercury, hydrogen chloride and hydrogen fluoride from each CFB boiler exhaust flue to determine compliance with the emission limits contained in Condition 13. Initial performance tests shall also be conducted for antimony, arsenic, beryllium, cadmium, chromium, cobalt, manganese, lead, nickel, and selenium compounds in order to verify that expected controlled emission rates provided in Virginia Electric and Power Company's application dated February 15, 2008 can be achieved. The test methods to be used are the following USEPA reference methods, except that equivalent test methods may be substituted upon request, if approved by the Director, Southwest Regional Office, as equivalent and allowable by applicable regulations:

<u>Pollutant</u>	<u>Test Method</u>
Filterable Particulate Matter	EPA Method 5
Total PM-10	EPA Method 201A and 202
Condensable PM-10	EPA Method 202
Antimony Compounds	EPA Method 29
Beryllium Compounds	EPA Method 29
Cadmium Compounds	EPA Method 29
Manganese Compounds	EPA Method 29
Lead Compounds	EPA Method 29
Nickel Compounds	EPA Method 29
Selenium Compounds	EPA Method 29
Carbon Monoxide	EPA Method 10

Volatile Organic Compounds	EPA Methods 25A
Mercury	EPA Method 101A
Hydrogen Chloride	EPA Method 26A
Hydrogen Fluoride	EPA Method 26A

The tests shall be performed and reported within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and 9 VAC 5-60-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Director, Southwest Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Southwest Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.

The permittee shall perform an initial stack test for PM-2.5 in the time frames as required for testing the other pollutants in this condition if a test method for PM-2.5 has received final approval by the USEPA or DEQ at that time. If a test method for PM-2.5 has not received final approval by the USEPA or DEQ at the time initial testing as required in this condition is to be conducted, the permittee shall perform initial stack testing for PM-2.5 within 60 days of final approval of a test method by USEPA or DEQ, or as required by the Director, Southwest Regional Office.

(9 VAC 5-80-1490, 9 VAC 5-50-30, 9 VAC 5-50-410 and 40 CFR 63.43(g))

28. **Visible Emissions Evaluation** – Concurrently with the initial performance tests, visible emission evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted by the permittee on the common exhaust stack for the CFB boilers and auxiliary boiler. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with the Director, Southwest Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. The evaluation shall be performed and reported within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Should conditions prevent concurrent opacity observations, the Director, Southwest Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. Two copies of the test result shall be submitted to the Director, Southwest Regional Office within 45 days after test completion and shall conform to the test report



format enclosed with this permit. After the initial VEE, compliance with the applicable opacity limits shall be monitored using COMS data.  
(9 VAC 5-80-1490, 9 VAC 5-50-30, 40 CFR 60.50Da(b)(3), 9 VAC 5-50-410 and 40 CFR 63.43(g))

### **CONTINUING COMPLIANCE DETERMINATION**

29. **Stack Tests** – Annually and upon request by the DEQ, the permittee shall conduct performance tests for carbon monoxide, particulate matter, PM-10, volatile organic compounds, mercury, hydrogen chloride and hydrogen fluoride from each CFB boiler exhaust to demonstrate compliance with the emission limits contained in this permit. In a calendar year when a relative accuracy test audit (RATA) is conducted on a CEMS, then a stack test for the pollutant monitored by that CEMS is not required. The permittee shall conduct annual performance tests for PM-2.5 emissions from each CFB boiler upon USEPA or DEQ final approval of a test method, or as required by the Director, Southwest Regional Office. The details of the tests shall be arranged with the Director, Southwest Regional Office. In addition to performance tests, continuous compliance with emission standards and permit limits shall be determined by CEMS data.  
(9 VAC 5-80-1490, 9 VAC 5-50-30 G and 40 CFR 63.43(g))
30. **Stack Tests** – If results of the initial performance test indicate PM-10 emissions from the CFB boilers exceed the PM-10 emission limit in lb/MMBtu in this permit, the permittee shall complete an optimization of all equipment affecting such emissions and retest for PM-10 emissions from the CFB boilers in accordance with the following:
- a. The permittee shall submit to the Director, Southwest Regional Office for approval a plan for optimizing the performance of all equipment affecting PM-10 emissions. The optimization plan shall be submitted within 60 days of reporting to DEQ the results of the initial performance test.
  - b. The permittee shall complete the approved optimization and notify the Director, Southwest Regional Office in writing of such completion within 180 days of DEQ approval of the optimization plan. If additional time is needed to complete the optimization plan, the permittee may submit a written request for additional time to the Director, Southwest Regional Office.
  - c. The permittee shall conduct and report the results of a performance test for PM-10 emissions from the CFB boilers within 60 days of completion of the optimization plan. The details of the test shall be arranged with the Director, Southwest Regional Office.

If results of the retest required in paragraph c. of this condition indicate an exceedance of the PM-10 emission limit and the permittee can demonstrate to the satisfaction of the DEQ that the actual condensable portion of PM-10 causes the exceedance, a change to the permit in accordance with 9 VAC 5-80-1925, shall be initiated within 30 days of reporting to DEQ the

results of the retest to revise the PM-10 emission limit to the optimized rate up to a maximum of 0.030 lb/MMBtu. During implementation of the optimization plan, retest or permit change as required in this condition, failure to meet the PM-10 emission limits in this permit for the CFB boilers shall not be considered a violation by DEQ provided the filterable PM-10 emissions, as determined by EPA Method 201A, do not exceed 0.010 lb/MMBtu and the total PM-10 emissions, including the condensable PM-10 emissions, as determined by EPA Methods 201A and 202, or other methods as approved by DEQ, do not exceed 0.030 lb/MMBtu.

(9 VAC 5-80-1490, 9 VAC 5-50-30 G and 40 CFR 63.43(g))

31. **Stack Tests** – If results of the initial stack test indicate hydrogen fluoride emissions from the CFB boilers exceed the hydrogen fluoride emission limits in this permit, the permittee shall complete an optimization of all equipment affecting such emissions and retest for hydrogen fluoride emissions from the CFB boilers in accordance with the following:

- a. The permittee shall submit to the Director, Southwest Regional Office for approval a plan for optimizing the performance of all equipment affecting hydrogen fluoride emissions. The optimization plan shall be submitted within 60 days of reporting to DEQ the results of the initial performance test.
- b. The permittee shall complete the approved optimization and notify the Director, Southwest Regional Office in writing of such completion within 180 days of DEQ approval of the optimization plan. If additional time is needed to complete the optimization plan, the permittee may submit a written request for additional time to the Director, Southwest Regional Office.
- c. The permittee shall conduct and report the results of a performance test for hydrogen fluoride emissions from the CFB boilers within 60 days of completion of the optimization plan. The details of the test shall be arranged with the Director, Southwest Regional Office. The performance test shall include a fuel analysis and stack tests performed simultaneously on the inlet and outlet of each CFB boiler fabric filter baghouse to determine the hydrogen fluoride emission reduction.

If results of the retest required in paragraph c. of this condition indicate an exceedance of the hydrogen fluoride emission limit, a change to the permit in accordance with 9 VAC 5-80-1925, shall be initiated within 30 days of reporting to DEQ the results of the retest to revise the hydrogen fluoride emission limit to the optimized rate up to a maximum rate of 0.0023 lb/MMBtu. During implementation of the optimization plan, retest or permit change as required in this condition, failure to meet the hydrogen fluoride emission limit in this permit shall not be considered a violation by DEQ so long as hydrogen fluoride emissions do not exceed 0.0023 lb/MMBtu.

(9 VAC 5-80-1490, 9 VAC 5-50-30 G and 40 CFR 63.43(g))

32. **Stack Tests** – If results of the initial stack test indicate mercury emissions from the CFB boilers exceed the mercury emission limit in this permit, the permittee shall complete an optimization of all equipment affecting such emissions and retest for mercury emissions from the CFB boilers in accordance with the following:

- a. The permittee shall submit to the Director, Southwest Regional Office for approval a plan for optimizing the performance of all equipment affecting mercury emissions. The optimization plan shall be submitted within 60 days of reporting to DEQ the results of the initial performance test.
- b. The permittee shall complete the approved optimization and notify the Director, Southwest Regional Office in writing of such completion within 180 days of DEQ approval of the optimization plan. If additional time is needed to complete the optimization plan, the permittee may submit a written request for additional time to the Director, Southwest Regional Office.
- c. The permittee shall conduct and report the results of a performance test for mercury emissions from the CFB boilers within 60 days of completion of the optimization plan. The details of the test shall be arranged with the Director, Southwest Regional Office. The performance test shall include a fuel analysis and stack tests performed simultaneously on the inlet and outlet of each CFB boiler fabric filter baghouse to determine the mercury emission reduction.

(9 VAC 5-80-1490, 9 VAC 5-50-30 G and 40 CFR 63.43(g))

33. **Stack Tests** – There is limited experience with electric generating units operating under MACT limits for mercury. Therefore, if the permittee reasonably demonstrates using operational and other related information collected for a period not shorter than the first 12 months of operation of all the equipment used to control mercury (including limestone injection, fluidized gas desulfurization, activated carbon injection, fabric filters and good combustion practices) that the lb/MWhr and/or the lb/yr limit are not achievable on a consistent basis under reasonably foreseeable conditions, then testing and evaluation shall be conducted to determine an appropriate adjusted maximum achievable annual emission limit in accordance with the following procedure:

- a. In order to obtain an adjustment of the lb/MWhr and/or lb/yr MACT limit for mercury set forth in this permit, the permittee shall submit to the Director, Southwest Regional Office for approval a protocol for the testing of mercury 30 days prior to testing. In addition, the permittee shall submit to the Director, Southwest Regional Office for approval an analysis of the mercury content of the fuel combusted by the facility during the history of its operation. The permittee shall submit to the Director, Southwest Regional Office the test results and any calculations and assumptions used to develop an adjusted MACT annual permit limit for mercury within 45 days of testing.

- b. The permit may be amended to incorporate an adjusted lb/MWhr and/or lb/yr MACT mercury limit in accordance with Article 7 of the State Air Pollution Control Board Regulations. The adjusted MACT limit shall be based on operational and other related information available no less than 12 months after the commencement of operations using all available control equipment.
- c. During any period after the first 12 months of operation in which the permittee has applied for an adjusted lb/MWhr and/or lb/yr MACT limit for mercury but before one becomes effective or such application is denied by the Department, the plant shall be deemed to be in compliance with its mercury emissions as long as the plant is using the equipment installed at the plant and good air pollution control practices to minimize mercury emissions to the maximum extent achievable. At that time, the permittee shall demonstrate compliance by the use of such equipment and practices based on a protocol to be submitted for approval prior to commencement of operations and amended to account for actual operations. The protocol shall include the optimization of activated carbon injection.

(9 VAC 5-80-1490, 9 VAC 5-50-30 G and 40 CFR 63.43(g))

34. **Carbon Monoxide Emissions Compliance Determination** – The average carbon monoxide emission rate for each CFB boiler shall be used to demonstrate compliance with the emission limit of 0.15 lb/MMBtu applicable at loads equal to or greater than 75 percent of maximum. The permittee shall calculate the average carbon monoxide emission rate for each CFB boiler using all valid CEMS values measured at loads of 75 percent or greater for each rolling 30-day period using the following formula:

$$ER_{CO\ 30d\ H} = \frac{\sum_{i=1}^n ER_i}{n}$$

where,

$ER_{CO\ 30d\ H}$  = 30-day average carbon monoxide emission rate, for the load range of 75 percent and greater; lb/MMBtu

$ER_i$  = the incremental CEMS-measured carbon monoxide emission rate at loads of 75 percent and greater; lb/MMBtu

$i$  = incremental CEMS reading

$n$  = the number of incremental CEMS readings in the rolling 30-day period when the heat input rate was in the load range of 75 percent and greater

The 30-day load weighted average carbon monoxide emission rate for each CFB boiler shall be used to demonstrate compliance with the emission limit calculated in accordance with Condition 13, for loads less than 75 percent of maximum. The permittee shall calculate the

30-day load weighted average carbon monoxide emission rate for each CFB boiler using all valid CEMS values measured at all loads greater than zero using the following formula:

$$ER_{CO\ 30d\ L} = \frac{\sum_{i=1}^n ER_i \times IR_i}{\sum_{i=1}^n IR_i}$$

where,

$ER_{CO\ 30d\ L}$  = 30-day weighted average carbon monoxide emission rate; lb/MMBtu  
 $ER_i$  = the incremental hour's CEMS-measured carbon monoxide emission rate; lb/MMBtu  
 $IR_i$  = the heat input rate corresponding to the incremental CEMS reading; MMBtu  
 $i$  = incremental CEMS reading having a non-zero heat input rate  
 $n$  = the number of incremental CEMS readings in the rolling 30-day period when there is a heat input rate

Maximum load for each CFB boiler is considered to be 3,132 MMBtu/hr heat input. The requirements of this condition shall not limit the validity or use of other methods of compliance determination as may be required in this permit or approved by DEQ. (9 VAC 5-80-1470, 9 VAC 5-170-160 and 40 CFR 63.43(g))

## **RECORDS**

35. **On Site Records** – The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

- a. Monthly and annual heat input to each CFB boiler. Annual heat input shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- b. Monthly and annual throughput of each type of fuel and limestone to each CFB boiler. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

- c. Monthly and annual amounts of each type of fuel delivered to the facility. Annual amounts shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- d. Emissions calculations, based on data from fuel analyses, stack tests and CEMS, for each CFB boiler using calculation methods approved by the Director, Southwest Regional Office, to verify compliance with the applicable emission limits in this permit.
- e. Carbon monoxide emission limit calculations in accordance with Condition 13.
- f. Carbon monoxide emission rate calculations in accordance with Condition 34.
- g. All fuel supplier certifications.
- h. Results of each as-fired fuel sample analysis.
- i. Information required in each Excess Emission Report and continuous monitoring system Semi-Annual Report as required in this permit.
- j. Gross electrical output, in MWhr, for the facility and steam production for each CFB.
- k. Scheduled and unscheduled maintenance and operator training.
- l. Continuous monitoring system calibrations and calibration checks, percent operating time, excess emissions, and adjustments and maintenance performed on continuous monitoring systems and devices.
- m. Results of all stack tests, visible emission evaluations and performance evaluations.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-1470, 9 VAC 5-50-50, 9 VAC 5-50-410 and 40 CFR 63.43(g))

## **NOTIFICATIONS**

36. **Initial Notifications** – The permittee shall furnish written notification to the Director, Southwest Regional Office of:
- a. The actual date on which construction of the CFB boilers commenced within 30 days after such date.
  - b. The actual start-up date of the CFB boilers within 15 days after such date.

- c. The anticipated date of continuous monitoring system performance evaluations postmarked not less than 30 days prior to such date.
- d. The anticipated date of performance tests of the CFB boilers postmarked at least 30 days prior to such date.

Copies of the written notifications referenced in this condition are to be sent to:

Associate Director  
Office of Air Enforcement (3AP10)  
U.S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

(9 VAC 5-80-1470, 9 VAC 5-50-50 and 40 CFR 63.43(g))

#### **GENERAL CONDITIONS**

37. **Permit Invalidation** – This permit to construct the CFB boilers shall become invalid, unless an extension is granted by the DEQ, if:

- a. A program of continuous construction is not commenced within 18 months from the date of this permit; or
- b. A program of construction is discontinued for a period of 18 months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of a phased construction project.

(9 VAC 5-80-1500)

38. **Changes to Permits** – Changing, amending, and reopening this permit may be initiated by the DEQ or the permittee and shall be made as specified in 9 VAC 5-80-1540.

(9 VAC 5-80-1540)

39. **Permit Suspension/Revocation** – This permit may be suspended or revoked if the permittee:

- a. Knowingly makes material misstatements in the permit application or any amendments to it;
- b. Fails to comply with the terms or conditions of this permit;
- c. Fails to comply with any emission standards applicable to a permitted emissions unit; or

- d. Fails to comply with the applicable provisions of Article 7.

(9 VAC 5-80-1500 F)

40. **Right of Entry** – The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:

- a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;
- b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;
- c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and
- d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.  
(9 VAC 5-80-1470 and 9 VAC 5-170-130)

41. **Maintenance/Operating Procedures** – The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.  
(9 VAC 5-80-1470 and 9 VAC 5-50-20 E)



42. **Record of Malfunctions** – The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.  
(9 VAC 5-80-1470 and 9VAC 5-20-180 J)
43. **Notification for Facility or Control Equipment Malfunction** – The permittee shall furnish notification to the Director, Southwest Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Director, Southwest Regional Office.  
(9 VAC 5-80-1470 and 9 VAC 5-20-180 C)
44. **Notification for Control Equipment Maintenance** – The permittee shall furnish notification to the Director, Southwest Regional Office of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:
- a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;
  - b. The expected length of time that the air pollution control equipment will be out of service;
  - c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;
  - d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.
- (9 VAC 5-80-1470 and 9 VAC 5-20-180 B)
45. **Violation of Ambient Air Quality Standard** – The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.  
(9 VAC 5-80-1470 and 9 VAC 5-20-180 I)

46. **Transfer of Permits** – No person shall transfer this permit from one location to another or from one piece of equipment to another, except for the relocation of portable facilities that are exempt from the provisions of 9 VAC 5-80-1605, et seq., by 9 VAC 5-80-1695 A.2. (9 VAC 5-80-1530 A and C)
47. **Change of Ownership** – In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Director, Southwest Regional Office of the change of ownership within 30 days of the transfer. (9 VAC 5-80-1530 B)
48. **Existence of Permit No Defense** – The existence of this permit shall not constitute a defense to a violation of the Virginia Air Pollution Control Law (§10.1-1300 et seq. of the Code of Virginia) or the regulations of the board and shall not relieve any owner of the responsibility to comply with any applicable regulations, laws, ordinances and orders of the governmental entities having jurisdiction. (9 VAC 5-80-1510)
49. **Registration/Update** – Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact. The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.1-340 through 2.1-348 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information. (9 VAC 5-80-1470, 9 VAC 5-170-60 and 9 VAC 5-20-160)
50. **Permit Copy** – The permittee shall keep a copy of this permit on the premises of the facility to which it applies. (9 VAC 5-80-1470)
51. **Permit Invalidation** – This permit shall become invalid if the decision dated February 8, 2008 of United States Circuit Court of Appeals for the District of Columbia is reversed and the Clean Air Mercury Rule is not vacated. (9 VAC 5-170-160)

## **SOURCE TESTING REPORT FORMAT**

### Report Cover

1. Plant name and location
2. Units tested at source (indicate Ref. No. used by source in permit or registration)
3. Test Dates.
4. Tester; name, address and report date

### Certification

1. Signed by team leader/certified observer (include certification date)
2. Signed by responsible company official
3. \*Signed by reviewer

### Copy of approved test protocol

### Summary

1. Reason for testing
2. Test dates
3. Identification of unit tested & the maximum rated capacity
4. \*For each emission unit, a table showing:
  - a. Operating rate
  - b. Test Methods
  - c. Pollutants tested
  - d. Test results for each run and the run average
  - e. Pollutant standard or limit
5. Summarized process and control equipment data for each run and the average, as required by the test protocol
6. A statement that test was conducted in accordance with the test protocol or identification & discussion of deviations, including the likely impact on results
7. Any other important information

### Source Operation

1. Description of process and control devices
2. Process and control equipment flow diagram
3. Sampling port location and dimensioned cross section Attached protocol includes: sketch of stack (elevation view) showing sampling port locations, upstream and downstream flow disturbances and their distances from ports; and a sketch of stack (plan view) showing sampling ports, ducts entering the stack and stack diameter or dimensions

### Test Results

1. Detailed test results for each run
2. \*Sample calculations
3. \*Description of collected samples, to include audits when applicable

### Appendix

1. \*Raw production data
2. \*Raw field data
3. \*Laboratory reports
4. \*Chain of custody records for lab samples
5. \*Calibration procedures and results
6. Project participants and titles
7. Observers' names (industry and agency)
8. Related correspondence
9. Standard procedures

\* Not applicable to visible emission evaluations